

## REMARKS

In the Office Action mailed January 24, 2008, the Examiner noted that claims 1-18 were pending and rejected claims 1-18. Claims 1, 9 and 14 have been amended, no claims have been canceled, new claim 19 has been added; and, thus, in view of the foregoing claims 1-19 remain pending for reconsideration which is requested. No new matter is believed to have been added. The Examiner's rejections and objections are respectfully traversed below.

### Rejection under 35 U.S.C. § 102

The Office Action, on page 2, rejected claims 1, 2, 9, 10, 14 and 15 under 35 U.S.C. § 102(b) as being anticipated by Rosenberg et al. (U.S. Publication No. 2002/0021283, hereinafter "Rosenberg").

Rosenberg is related to interactions between simulated objects using force feedback (see Abstract of Rosenberg). Specifically, Rosenberg describes a user interacting with computer simulated environments both visually and through haptic sensations (see paragraph [0002] of Rosenberg). The Office Action asserted that paragraph [0048] of Rosenberg discloses the feature of an expression controller (see Office Action, last line on page 2 to the first 3 lines on page 3). However, claim 1 has been amended to recite

an expression controller that selects respectively one or more expression modes corresponding to before, during and after interaction of the objects, and express the interaction magnitude of the objects corresponding to before, during and after interaction of the objects in selected one or more expression modes, wherein the one or more expression modes include at least one of impact waveform, animation, color, impact sound and vibration

(claim 1, lines 9-13), which is supported by at least one of the embodiments of the invention on pages 18 and 19 and figures 2A and 2B of the application.

It is submitted that Rosenberg fails to disclose, either expressly or implicitly, at least the above mentioned features recited in claim 1, for at least the following reasons.

According to Rosenberg, a force feedback is provided to the user to impart a physical sensation corresponding to the interaction of the simulated objects (see paragraph [0048] and Abstract of Rosenberg). The Examiner, on page 4 of the Office Action, admitted that gravitational forces interact forever. That is, in Rosenberg there is always an interaction. There is no state that comes before an interaction and there is no state that comes after an interaction, there is always an interaction. According to the Examiner's admission, objects are interacting gravitationally before a collision, interacting at or during a collision and interacting gravitationally after a collision; that is, always interacting. Rosenberg according to the Examiner's

interpretation is not concerned with "expression modes ... **before interaction**" or "expression modes ... **after interaction**" as recited in claim 1 much less where "one or more expression modes ... [that] include at least one of impact waveform, animation, color, impact sound and vibration".

Thus, in view of the above, it is submitted that claim 1 is patentable over Rosenberg.

Independent claims 9 and 14 have been amended to emphasize features similar to those in amended claim 1. Therefore, it is submitted that claims 9 and 14 are patentable over Rosenberg for reasons similar to those discussed above with respect to claim 1.

Dependent claims 2, 10 and 15 are also patentable over Rosenberg for at least the same reasons as their respective base claims, from which they depend.

Accordingly, withdrawal of the rejection is respectfully requested.

### **Rejection under 35 U.S.C. § 103**

The Office Action, on page 6, rejected claims 3, 4, 11 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Rosenberg in view of Tarr (U.S. Patent No. 6,191,796).

Tarr is related to haptically manipulate rigid, plastically deformable, and visco-elastically deformable surfaces within a virtual reality environment (see column 1, lines 8-12, of Tarr). However, nothing was found or cited in Tarr that cures the above mentioned deficiencies of Rosenberg as discussed above. Therefore, claims 3, 4, 11 and 16 are also patentable over Rosenberg and Tarr, taken alone or in combination, for at least the same reasons as their respective base claims from which they depend.

The Office Action, on page 7, rejected claims 5, 6, 12 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Rosenberg in view of Gagne et al. (U.S. Patent No. 5,731,819, hereinafter "Gagne").

Gagne relates to deforming graphical objects to simulate the effects of motion so that the graphic appears less stiff (see column 1, lines 5-10, of Gagne). However, nothing was found or cited in Gagne that cures the above mentioned deficiencies of Rosenberg as discussed above. Therefore, claims 5, 6, 12 and 17 are patentable over Rosenberg and Gagne, taken alone or in combination, for at least the same reasons as their respective base claims, from which they depend.

The Office Action, on page 8, rejected claims 7, 8, 13 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Rosenberg and Tarr in view of Pryor (U.S. Patent No. 5,982,352).

Pryor is related to a method that provides human input to a computer that allows a user to interact with a display connected to the computer (see Abstract, of Pryor). However, nothing was found or cited in Pryor that cures the above mentioned deficiencies of Rosenberg and Tarr as discussed above. Therefore, it is submitted that claims 7, 8, 13 and 18 are patentable over Rosenberg, Tarr, and Pryor, taken alone or in combination, for at least the same reasons as their respective base claims, from which they depend.

Accordingly, withdrawal of the rejection is respectfully requested.

#### **New Claim**

New claim 19 has been added to emphasize the feature of "expressing the magnitude of the interaction of the objects corresponding to the interactions before, during, and after the collision of the objects responsive to a selection of at least one of the modes of the expression that includes at least one or more waveform, animation, color, sound, and vibration", which is not disclosed, either expressly or implicitly, in the cited references. Support for can be found on pages 18 and 19 and Figs. 2A and 2B of the application. Therefore, it is submitted that claim 19 is patentable over the cited references, taken alone or in combination.

#### **Summary**

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims patentably distinguish over the prior art. There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Serial No. 10/774,593

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: /Sheetal S. Patel/  
Sheetal S. Patel  
Registration No. 59,326

1201 New York Avenue, N.W., 7th Floor  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501